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EXAMINER	
HOYE, MICHAEL W	
ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/734,996	BRASSIL, JOHN T.	
	Examiner	Art Unit	
	Michael W. Hoye	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 July 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30 and 32-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30 and 32-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 3, 2007 has been entered.

Response to Arguments

2. Applicant's arguments, see Remarks, filed on July 3, 2007, with respect to the rejection of claims 1-28, as well as claims 29-30 and 32-37, have been considered but are moot in view of the new grounds of rejection.

Applicant's arguments with respect to claims 29-30 and 32-37, and more specifically, with respect to the Reynolds reference are not persuasive.

Regarding the Reynolds reference, the Applicant argues on pages 22-23 that, "The local meta data of Reynolds is public because it can be read and interpreted by any receiver."

In response, the Examiner respectfully notes that the Reynolds et al reference, as referred to in the new grounds of rejection, teaches a system using embedded meta data (i.e., announcements, packages, and triggers) in a data or media stream with the media content, which equates to the claimed "cue", in addition, the claimed "to provide precise time synchronization..." is met by the announcements are used to announce currently available

programming to the receiver and have a time period for which they are valid (see ¶'s [0013]-[0015], [0025], [0028]-[0030] and Figs. 1-4), and more specifically, the claimed "private cue" is met by the specification of "tve" options to the "A" parameter for a Transport B announcement, which include: in a first example, a priority level to determine whether or not an announcement or "cue" is interpreted for allowing substitution; in a second example, the determination is based upon the geographical region where the processor 134 operates; and in a third example, the value of a unique "ID" determines which processors 134 are permitted to interpret and allow substitution (see ¶'s [0032]-[0043]). Therefore, the Reynolds et al reference clearly teaches embedding "private cues" such as unique IDs or geographical regions in the meta data (announcements, triggers, etc.) to provide precise time synchronization for the processing of the media streams by one or more specific affiliates or geographical regions.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-11, 13-18, 23-30 and 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flavin (USPN 6,005,603), in view of Reynolds et al (US 2001/0037500 A1), both previously cited by the Examiner.

As to claim 1, note the Flavin reference which discloses a streaming media server (109 or 110 as shown in Figs. 1 and 2) for providing media content in a plurality of media streams (col.

2, lines 58-65; col. 3, lines 17-35 and col. 4, lines 23-52). Furthermore, segment announcers 109 and 110 are servers, which have a central data bank of descriptive information or descriptions 250 about the content of various content streams 112 currently being transmitted and/or to be transmitted in the future, and the descriptions 250 may be entered manually or automatically. In some cases these descriptions 250 are already associated with the content streams and programming descriptions from various program subscription services. The descriptions 250 of the content are transmitted by announcement 115 over the communication link 120 to the segment announcement receivers 150. Each announcement 115 may include cue points (col. 5, lines 17-25), and announcements 115 are transmitted in the content stream 112 (see col. 5, line 32-53), as described above (also see col. 2, lines 58-65; col. 3, lines 17-35 & 40-44; col. 4, line 23 – col. 6, line 7). Therefore, the segment announcers 109 and 110 meet the claimed streaming media server from providing a plurality of media streams comprising a cue generator. Although, the segment announcers 109/110 may not necessarily be the originating source of the media streams (i.e. a television broadcast station), they are still providers of a plurality of media streams (i.e., a live television broadcast which is distributed through the server(s)). The claimed "cue generator" is met by the segment announcer 110 (Figs. 1 and 2, and sections listed above) "for receiving an event detected signal and configuration information" is met by content streams 112 and descriptive information (col. 2, lines 58-65; col. 3, lines 17-35 and col. 4, lines 23-52), and the claimed "based thereon for generating a *private* cue having a predefined structure" is met in-part by the segment announcer and announcement 115 (col. 3, lines 17-35, col. 4, lines 23-52 and col. 5, lines 11-38); the claimed "wherein the *private* cue is configured to be used by a stream processing application (SPA) *of only specific affiliates* to receive information concerning an

event associated with the media content *and wherein the private cue is not interpreted by a third party other than the specific affiliates*" is met in-part by the application(s) provided by the server 110 or segment announcer 110 (col. 4, line 35 – col. 5, line 37). The claimed "cue handling mechanism for embedding the private cue into one of the plurality of media streams with the media content to provide precise time synchronization for the processing of the one of the plurality of media streams by the SPA; and a network interface for transmitting the embedded *private* cue and the media content in the one of the plurality of media streams to the SPA *of the specific affiliates*" is not explicitly disclosed by the Flavin reference. Flavin teaches that descriptive information 250 and announcements 115 including cue points may be entered automatically and transmitted in real time as described in the sections cited above. However, Flavin is silent as to whether or not the "cues" are embedded into one of the plurality of media streams, in addition to, Flavin does not explicitly disclose the use of "**private** cue(s)" as indicated in italics in the claim limitations as presented above. The Reynolds et al reference teaches a system using embedded meta data (i.e., announcements, packages, and triggers) in a data or media stream with the media content, which equates to the claimed "cue", in addition, the claimed "to provide precise time synchronization..." is met by the announcements are used to announce currently available programming to the receiver and have a time period for which they are valid (see ¶'s [0013]-[0015], [0025], [0028]-[0030] and Figs. 1-4), and more specifically, the claimed "private cue" is met by the specification of "tve" options to the "A" parameter for a Transport B announcement, which include: in a first example, a priority level to determine whether or not an announcement or "cue" is interpreted for allowing substitution; in a second example, the determination is based upon the geographical region where the processor 134

operates; and in a third example, the value of a unique "ID" determines which processors 134 are permitted to interpret and allow substitution (see ¶'s [0032]-[0043]). Therefore, it would have been obvious to one of ordinary skill in the art to have combined the Flavin reference with the additional teachings of the Reynolds et al reference for the advantages of embedding "private cues" such as unique IDs or geographical regions in the meta data (announcements, triggers, etc.) to provide precise time synchronization for the processing of the media streams by one or more specific affiliates or geographical regions.

As to claim 2, the claimed private cue includes one of program timing, program structure, program identity, start time of a media program, and stop time of a media program is met by the combination of Flavin and Reynolds as described above in the rejection claim 1, and more specifically note the program timing, structure, identity, start time, and end time of a program as discussed in col. 3, lines 37-40, col. 4, line 65 – col. 5, line 30, col. 5, line 63 – col. 6, line 7 of Flavin.

As to claim 3, the claimed stream processing application (SPA) is a program recording application is met by the recording applications as described in the example in col. 4, line 65 – col. 5, line 10 of Flavin.

As to claim 4, the claimed stream processing application (SPA) is a program insertion application is met by, in one example given in Flavin, inserting text on a TV or computer screen (col. 6, lines 30-36).

As to claim 5, the claimed stream processing application (SPA) is a program modification application is met by various examples in the Flavin reference, including eliminating commercials, turning the sound on or off, turning the picture on or off, displaying text on a TV

or computer screen, sounding an alarm, etc. (see col. 4, line 65 – col. 5, line 10 and col. 6, lines 30-36).

As to claim 6, the claimed stream processing application (SPA) is a program adaptation application is met in Flavin by adapting to a program or broadcast associated with a geographic region or location (col. 5, lines 11-16).

As to claim 7, the claim is rejected based on the rejection of claim 4 respectively.

As to claim 8, the claimed private cue includes time sensitive program information is met by the combination of Flavin and Reynolds as described above in the rejection of claim 1, wherein time information is transmitted with each announcement 115 (see col. 5, lines 17-31 and col. 5, line 48 – col. 6, line 4 of Flavin and ¶ [0013] of Reynolds).

As to claim 9, the claimed private cue includes a cue type that is one of an event notification cue, an event pending cue, an event termination cue, and an event continuing cue, and a user-defined custom cue is met by the combination of Flavin and Reynolds as described above in the rejection of claim 1, and more specifically by the announcements 115 and segment content information 350 in col. 5, line 17 – col. 6, line 4 of Flavin.

As to claim 10, Flavin in combination with Reynolds further discloses the claimed predefined structure of the private cue includes at least one of the following fields: an event type field for specifying an event type as met by an announcement 115, a segment identifier section 320, and/or the segment content information 350 (col. 5, lines line 17 – col. 6, line 4); a cue type field for specifying a cue type is met by the announcement type field 405 (col. 6, lines 19-20); a number field for specifying a number that in combination with the event type specified by the event type filed uniquely describes an event is met by the message tag 311 (col. 5, lines 39-44); a

duration field for specifying the time remaining before completion of a specified event is met by the interval information (col. 5, lines 32-37); a time field for specifying time information is met by time field 321 (col. 5, lines 48-53); and a variable-length label field for storing text suitable for display is met by the variable length announcement content 353 field (col. 5, line 67 – col. 6, line 7).

As to claim 11, the claimed event type field is one of an advertisement event type, a video-frame event type, an interstice event type, an audio-track event type, an audio-segment event type, an video-segment event type cue, program-title event type, program-description event type, program-label event type, content-type event type, program-advisory, and user-defined event type is met by the announcement 115, segment identifier section 320, and/or segment content information 350, as described above in the Flavin reference, which disclose various event types as listed (see col. 5, lines line 17 – col. 6, line 4).

As to claim 13, note the Flavin reference which discloses a method for delivering information associated with a media program in a media stream to a stream processing application (SPA). The claimed identifying an event in the media program of the media stream is met by the streaming media server (109 or 110 as shown in Figs. 1 and 2, and as described above in claim 1), which identifies an event in the media program of the media stream (col. 2, lines 58-65; col. 3, lines 17-35 and col. 4, lines 23-52), where the servers 109 and 110, as described above, identify events and produce announcements 115 therefrom, wherein each announcement 115 contains the time of the event, the type of event, and other information (see col. 5, line 11 – col. 6, line 7). The claimed determining if the event is a structural point based on the configuration information is met by using the content streams 112 and descriptive

information (col. 2, lines 58-65, col. 3, lines 36-40, col. 4, lines 23-52 and col. 5, line 11 – col. 6, line 7), and generating a *private* cue packet to represent the structural point in response to determining that the event is a structural point is met by the segment announcer 110 and announcement 115 is met in-part by Figs. 1 and 2, col. 3, lines 17-35, col. 4, lines 23-52 and col. 5, lines 11-38 of Flavin. The claimed "wherein the private cue packet is configured to be used by the stream processing application (SPA) of only specific affiliates to receive information concerning the event and; embedding said private cue packet in said media stream with the media program to provide precise time synchronization for processing of the media stream by the SPA; and transmitting said *private* cue packet and the media program in the media stream to the SPA of the specific affiliates" is not explicitly disclosed by Flavin. The Flavin reference teaches that announcements 115, including cue points, may be transmitted in the content stream 112, as described above in claim 1 (see col. 5, lines 17-53). However, Flavin is silent as to whether or not the "cue" packet is embedded in said media stream, in addition to, Flavin does not explicitly disclose the use of "**private** cue(s)" as indicated in the claim limitations as presented above. The Reynolds et al reference teaches a system using embedded meta data (i.e., announcements, packages, and triggers) in a data or media stream with the media content, which equates to the claimed "cue", in addition, the claimed "to provide precise time synchronization..." is met by the announcements are used to announce currently available programming to the receiver and have a time period for which they are valid (see ¶'s [0013]-[0015], [0025], [0028]-[0030] and Figs. 1-4), and more specifically, the claimed "private cue" is met by the specification of "tve" options to the "A" parameter for a Transport B announcement, which include: in a first example, a priority level to determine whether or not an announcement or "cue" is interpreted for allowing

substitution; in a second example, the determination is based upon the geographical region where the processor 134 operates; and in a third example, the value of a unique "ID" determines which processors 134 are permitted to interpret and allow substitution (see ¶'s [0032]-[0043]). Therefore, it would have been obvious to one of ordinary skill in the art to have combined the Flavin reference with the additional teachings of the Reynolds et al reference for the advantages of embedding "private cues" such as unique IDs or geographical regions in the meta data (announcements, triggers, etc.) to provide precise time synchronization for the processing of the media streams by one or more specific affiliates or geographical regions.

As to claim 14, the claimed step of generating a private cue packet to represent the structural point includes one of a generating the private cue packet automatically is met by the combination of Flavin and Reynolds as described above in the rejection of claim 13, and more specifically by the automatic generation as described in col. 4, lines 38-52 of Flavin; and the claimed generating the private cue packet manually with a user-operated trigger is met by combination of Flavin and Reynolds as described above in the rejection of claim 13, and more specifically by a user or users generating the cues (see col. 2, line 58 – col. 3, line 16, col. 4, lines 35-37 of Flavin and the sections of Reynolds as cited above in claim 13).

As to claim 15, the claimed receiving a packet; determining whether the packet is a private cue packet; when the packet is a private cue packet, then determining if the private cue packet triggers an action based on predetermined configuration parameters; when the private cue packet triggers an action, using information from the private cue packet to perform a function; otherwise, discarding the private cue packet is met by the combination of Flavin and Reynolds as described above in the rejection of claim 13, and more specifically in col. 6, lines 30-67 of

Flavin, also see col. 4, lines 3-22 and col. 4, line 65 – col. 5, line 10; and the sections of Reynolds as cited above in claim 13.

As to claim 16, note the Flavin reference which discloses a content distribution network. The claimed media server for broadcasting a media program in at least one media stream to a stream processing application (SPA) of specific affiliates, the media program having at least one structural point is met in-part by the streaming media server (109 or 110 as shown in Figs. 1 and 2, and as described above in claims 1 and 13), which broadcasts a media streams (content streams 112) and descriptive information (col. 2, lines 58-65, col. 3, lines 36-40, col. 4, lines 23-52 and col. 5, line 11 – col. 6, line 7), and more specifically, the server(s) produce descriptive information 250 about the content of various content streams 112 currently being transmitted and/or to be transmitted in the future, where the descriptions 250 are transmitted by announcements 115, wherein an announcement may contain additional description such as "Start of Commercial" or "End of Commercial" and other information (see col. 5, line 11 – col. 6, line 7). Moreover, on page 9, lines 11-17, of the Applicant's specification, the term "structural point" is referred to as, "any point that has significance to the media being transmitted...structural points depend on the content. Examples of structural points include a starting point and ending point of a program segment and the starting points and ending points of sub-segments within the program segment." Therefore, the Flavin reference as described above meets the claimed limitation. The claimed server-side cue handling mechanism for delivering program timing, structure, and identity information related to the media program in the at least one media stream in the form of a *private* cue is met in-part by the segment announcer 110 and announcement(s) 115, including cue points, that may be transmitted in the content stream 112, as described above

in claim 1 (see col. 5, lines 17-53; also see Figs. 1 and 2, col. 3, lines 17-35 and col. 4, lines 23-52). The claimed "wherein the private cue is embedded in the at least one media stream with the media program to provide precise time synchronization for processing of the at least one media stream by the SPA of the specific affiliates, and wherein the private cue packet is configured to be used by the stream processing application (SPA) of only the specific affiliates such that the private cue is not interpreted by a third party other than the specific affiliates" is not explicitly disclosed by the Flavin reference. The Flavin reference teaches that announcements 115, including cue points, may be transmitted in the content stream 112, as described above in claim 1 (see col. 5, lines 17-53). However, Flavin is silent as to whether or not the "cue" packet is embedded in said media stream, in addition to, Flavin does not explicitly disclose the use of "**private** cue(s)" as indicated in the limitations of the claim. The Reynolds et al reference teaches a system using embedded meta data (i.e., announcements, packages, and triggers) in a data or media stream with the media content, which equates to the claimed "cue", in addition, the claimed "to provide precise time synchronization..." is met by the announcements are used to announce currently available programming to the receiver and have a time period for which they are valid (see ¶'s [0013]-[0015], [0025], [0028]-[0030] and Figs. 1-4), and more specifically, the claimed "private cue" is met by the specification of "tve" options to the "A" parameter for a Transport B announcement, which include: in a first example, a priority level to determine whether or not an announcement or "cue" is interpreted for allowing substitution; in a second example, the determination is based upon the geographical region where the processor 134 operates; and in a third example, the value of a unique "ID" determines which processors 134 are permitted to interpret and allow substitution (see ¶'s [0032]-[0043]). Therefore, it would have

been obvious to one of ordinary skill in the art to have combined the Flavin reference with the additional teachings of the Reynolds et al reference for the advantages of embedding "private cues" such as unique IDs or geographical regions in the meta data (announcements, triggers, etc.) to provide precise time synchronization for the processing of the media streams by one or more specific affiliates or geographical regions.

As to claim 17, the claimed a client-side cue handling mechanism for receiving packets, determining that a particular packet is a private cue packet, and decoding program tuning, structure, and identity information from the private cue packet is met by the combination of Flavin and Reynolds as described above in the rejection claim 16, also note the receivers 150 and function 170 of Flavin (col. 4, lines 3-22, col. 4, line 65 – col. 6, line 7 and lines 30-67), and the "tve" options as described above in Reynolds.

As to claim 18, the claimed application coupled to the client-side cue handling mechanism for using the program timing, structure, and identity information of the media stream to perform an application function is met by receivers 150 and function 170 of Flavin as described above in claim 17 (see col. 4, lines 3-22, col. 4, line 65 – col. 6, line 7 and lines 30-67).

As to claim 23, the claimed server of claim 1 further comprising a stream generator for generating said media streams is met by an alternative embodiment of Flavin where the media streams are generated by a stream generator that is inherent to a media server that produces various content streams 112 that can be sent by communication link 220/210 as shown in the alternative embodiment of Fig. 2 (see col. 4, lines 38-43).

As to claim 24, the claimed said cue generator is further operable to insert said generated private cue into a corresponding media stream to which said generated private cue relates is met

by the combination of Flavin and Reynolds as described above in the rejection of claim 1, where Flavin discloses one or more devices that can be used to automatically provide descriptions 250/announcements 115 (or cue points) for a content stream 112 (col. 4, lines 43-53 and col. 5, lines 11-62), where events such as commercial boundaries or segment types, etc. may be identified, and an announcement 115 or cue is generated/inserted into the content stream 112 (also see col. 3, lines 36-39).

As to claim 25, the Flavin and Reynolds references disclose the claimed server in claim 1 as described above. Flavin and Reynolds do not explicitly disclose the claimed "wherein said private cue is generated as a Real-Time Transport Protocol (RTP) payload. However, the Examiner takes Official Notice that it is notoriously well known in the art of video distribution systems that use the Internet as a network for distribution or broadcasting to use RTP for the advantage of delivering real-time data, including audio and video media more efficiently by using a well known Internet-standard protocol. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have used RTP for the advantage given above.

As to claim 26, the claimed server-side stream generator for generating said at least one media stream, wherein said cue handling mechanism inserts said private cue packet in the at least one media stream is met by combination of Flavin and Reynolds as described in the rejection of claim 17 above, and the generator of Flavin (as described above in claims 23-24), wherein the segment announcer 110 and announcement(s) 115, including cue points, that may be transmitted in the content stream 112, as described above in claim 1 (see col. 5, lines 17-53; also see Figs. 1

and 2, col. 3, lines 17-35 and col. 4, lines 23-52, also see the relevant portions of Reynolds as described in claim 17 above).

As to claim 27, the Flavin reference, as combined with Reynolds, further discloses the claimed server-side network interface (network interface connector or communication connector 205 see Fig. 2) for communicating said at least one media stream (112) having said private cue packet (115) inserted therein across a communication network (120) to at least one client (150, 151, 152, 160, 161 and 163, see col. 3, line 54 – col. 4, line 2 and col. 5, lines 32-62).

As to claim 28, the claimed said network interface broadcasts said at least one media stream having said private cue packet inserted therein to a plurality of clients is met by Flavin as combined with Reynolds where announcements 115, including cue points, may be transmitted in the content stream 112 and broadcast to a plurality of clients as described above in claims 1 and 27 (also see col. 5, lines 17-53).

As to claim 29, note the Flavin reference which discloses a method comprising generating a media stream containing a media program at a stream generator of a media server as met by a stream generator that is inherent to a media server that produces various content streams 112 that can be sent by communication link 220 as shown in the alternative embodiment of Fig. 2 (see col. 4, lines 38-43). The claimed "identifying an event in the media stream"; "determining if the event is a structural point as defined by configuration information"; and "generating, at a cue handling mechanism of the media server, a *private* cue packet to represent the structural point in response to determining that the event is a structural point" are met in-part by devices that can be used to automatically provide descriptions 250 about the content stream 112 (col. 4, lines 43-53 and col. 5, lines 11-25), where events such as commercial boundaries or segment

types, etc. may be identified, and based on configuration information one or more of the devices may determine if an event is a structural point, such as a starting point or ending point of a commercial segment, furthermore, from the description of the event an announcement 115 or cue is generated to represent the structural point of the event (also see col. 3, lines 36-39). The claimed "wherein the private cue packet is configured to be used by a stream processing application (SPA) of only specific client receivers to receive information concerning the structural point; embedding said cue packet in said media stream with the media program" is not explicitly disclosed by the Flavin reference. The Flavin reference teaches that announcements 115, including cue points, may be transmitted in the content stream 112, as described above in claim 1 (see col. 5, lines 17-53). However, Flavin is silent as to whether or not the "cue" packet is embedded in said media stream, in addition to, Flavin does not explicitly disclose the use of "**private** cue(s)" as indicated above in the limitations of the claim. The Reynolds et al reference teaches a system using embedded meta data (i.e., announcements, packages, and triggers) in a data or media stream with the media content, which equates to the claimed "cue", in addition, the claimed "to provide precise time synchronization..." is met by the announcements are used to announce currently available programming to the receiver and have a time period for which they are valid (see ¶'s [0013]-[0015], [0025], [0028]-[0030] and Figs. 1-4), and more specifically, the claimed "private cue" is met by the specification of "tve" options to the "A" parameter for a Transport B announcement, which include: in a first example, a priority level to determine whether or not an announcement or "cue" is interpreted for allowing substitution; in a second example, the determination is based upon the geographical region where the processor 134 operates; and in a third example, the value of a unique "ID" determines which processors 134 are

permitted to interpret and allow substitution (see ¶'s [0032]-[0043]). Therefore, it would have been obvious to one of ordinary skill in the art to have combined the Flavin reference with the additional teachings of the Reynolds et al reference for the advantages of embedding "private cues" such as unique IDs or geographical regions in the meta data (announcements, triggers, etc.) to provide precise time synchronization for the processing of the media streams by one or more specific affiliates or geographical regions. The claimed "communicating said media stream and said *private* cue packet from said media server to at least one intermediary network node" is met in-part by Flavin where the various content streams 112 and descriptions 250/announcements 115 are sent to the servers 110 (Fig. 2), and is more specifically met by Reynolds as described above, which includes various regional and/or local broadcast points in the distribution system (see ¶ [0015]). The claimed "said at least one intermediary network node modifying, based at least in part on said private cue packet, said media stream to generate a modified media stream; and said at least one intermediary network node communicating said modified media stream to at least one of the specific client receivers" is met in part by server 110 of Fig. 2 in Flavin, where a person 111 or group of people 111 may manually enter descriptive information about the content of one or more content streams 112 the are viewing (col. 3, lines 58-65), or the descriptions 250/announcements 115 may be entered automatically as described above, and the content stream(s) 112/announcement(s) are communicated to segment announcement receivers (150, 160, 161, 163 etc., see Fig. 1). The Reynolds et al reference, as combined above, specifically teaches a meta data substitution system 100 (Figs. 1-3) that can be situated at any point downstream of the original point of video distribution, such as a regional television network, a local television network affiliate, a local cable head end, or an internet service provider (see ¶'s

[0025], [0028]-[0030]). Therefore, it would have been obvious to one of ordinary skill in the art to have further combined Flavin with the additional teachings of the Reynolds et al reference for the advantages of providing additional intermediate network node(s) for modifying a media stream to generated a modified media stream, as well as, to provide for additional nodes or schedulers/servers to make updates or modifications to media streams and events within the broadcast streams that are more applicable to receivers in a specific or local region. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have included at least one intermediary network node modifying, based at least in part on said private cue packet, said media stream to generate a modified media stream; and said at least one intermediary network node communicating said modified media stream to at least one of the specific client receivers, for the advantages given above.

As to claim 30, the Reynolds et al reference as combined above further discloses the claimed said at least one client receiver processing said modified media stream to generate output to an end user as met by viewer 70 as shown in Fig. 1 (see ¶ [0025]).

As to claim 32, the Reynolds et al reference as combined above further discloses the claimed modifying comprises adding at least one cue packet to the media stream as met by the substitution system 110, including inserter 136 and processor 134, as shown in Fig. 2 (see ¶'s [0025], [0029], [0041]-[0043]).

As to claim 33, the Reynolds et al reference as combined above further discloses the claimed modifying comprises removing said private cue packet to the media stream as met by the substitution system 110, including stripper 132 and processor 134, as shown in Fig. 2 (see ¶'s [0025], [0029]-[0039], [0041]-[0043]).

As to claim 34, the Reynolds et al reference as combined above further discloses the claimed said modifying comprises inserting a second media stream into said media stream as met by the substitution system 110, including processor 134 and inserter 136 as described above, where the inserter 136 generates and inserts the final video data stream as shown in Fig. 2 (see ¶ [0041]).

As to claim 35, the Reynolds et al reference as combined above further discloses the claimed said second media stream comprises at least one advertisement as met by ¶ [0027].

As to claim 36, the Reynolds et al reference as combined above further discloses in Figs. 1 and 3 the claimed said media stream and said private cue packet are communicated from said media server (50) to a plurality of different intermediary network nodes (58 & 100 and 60 & 100a), wherein each of said different intermediary network nodes comprises respective target client receivers (regional viewing audience 59 and local viewing audience 61, both having respective target client receivers) to whom it communicates modified media stream generated thereby (see ¶ [0028] as described above).

As to claim 37, the Reynolds et al reference as combined above further discloses in Fig. 3 and in ¶ [0028], as described above, the claimed generating, by a first of said intermediary network nodes, a first modified media stream (110'); and generating, by a second of said intermediary network nodes, a different modified media stream (110'').

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flavin, in view of Reynolds et al, in further view of the SMPTE STANDARD (SMPTE 309M-1999) for Television – Transmission of Data and Time Zone Information in Binary Groups of Time and Control Code,

and the SMPTE STANDARD (SMPTE 12M-1999) for Television, Audio and Film – Time and Control Code, all cited by the Examiner.

As to claim 12, the claimed date field includes data information encoded with a Society of Motion Picture and Television Engineer's (SMPTE) date encoding and wherein the time field includes time information encoded with a Society of Motion Picture and Television Engineer's (SMPTE) time encoding is not explicitly disclosed by the Flavin and Reynolds references. However, it is notoriously well known in the art of media or video distribution to include time and date fields with data information encoded with SMPTE date and time encoding for the advantage of having time and date codes that conform to SMPTE standards, which are well known and used in the video industry and may be useful for identifying video frames and timing information, especially, for video editing purposes, and in addition to, the SMPTE Standard for Television – Transmission of Data and Time Zone Information in Binary Groups of Time and Control Code as well as the SMPTE Standard for Television, Audio and Film – Time and Control Code, provide further evidence that these standards are well known and used among those of ordinary skill in the art. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have included a date field that includes data information encoded with a Society of Motion Picture and Television Engineer's (SMPTE) date encoding and wherein the time field includes time information encoded with a Society of Motion Picture and Television Engineer's (SMPTE) time encoding for the advantages given above.

6. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flavin, in view of Reynolds et al, and in further view of Sequeira (US 2001/0000194 A1), all cited by the Examiner.

As to claim 19, the claimed intermediary stream processing application for receiving the media stream that includes the private cue packet, processing the media stream, and re-transmitting the media stream to one of other intermediary stream processing applications and a client-side cue handling mechanism, as described in claim 19, is not explicitly disclosed by the Flavin reference. The Sequeira reference discloses a distributed broadcast scheduler architecture where devices such as broadcast schedulers or media servers that can operate independently by providing a master/slave configuration, wherein failure of one device will not bring down the whole broadcast system. Also, a master scheduler/server may schedule digital media events, as well as, change and update events and corresponding events. Each task and media may be distributed to a relevant slave task scheduler for execution at a proper time, wherein a slave task scheduler/server may track the tasks given to it and prepare media devices to send the scheduled information at the appropriate time (pg. 1, [0013] – pg. 2, [0015] and [0031]-[0048] and Figs. 1-2). Furthermore, records including fields, which may have eventID's, process identifiers ("PID"), etc. are transmitted to other devices, such as a set-top boxes (STBs), downstream of the data servers, so that the devices may recognize and extract the data form the data stream and process the data accordingly (see [0099]-[0100], also see [0082]-[0097] and Figs. 12-13, 18-22, and 25-27). Therefore, it would have been obvious to one of ordinary skill in the art to have combined the Flavin and Reynolds references with the additional teachings of the Sequeira reference for the advantages of providing additional intermediate stream processing applications

in order to have backup systems incase parts of the broadcast network breakdown, as well as, to provide for additional schedulers/servers to make updates or modifications to media streams and events within the broadcast streams. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have included an intermediary stream processing application for receiving the media stream, processing the media stream, and re-transmitting the media stream to one of other intermediary stream processing applications and a client-side cue handling mechanism, for the advantages given above.

As to claim 20, the claimed processing the media stream includes processing at least one private cue packet, is met by the Flavin, Reynolds and Sequeira references as combined above in claim 19, where Reynolds teaches the "private" cue packets as described above, and Sequeira teaches that eventIDs, etc., which include start time, end time and other information, as described above, may be processed including updating or editing, adding, deleting, etc.

As to claim 21, the claimed wherein re-transmitting the media stream to one of other intermediary stream processing application and receivers includes adding at least one private cue packet to the media stream, is also met by the Flavin, Reynolds and Sequeira references as combined above in claim 19, where Reynolds teaches the "private" cue packets as described above, and Sequeira as combined teaches that cue packets such as eventIDs, etc., which include start time, end time and other information, as described above, may be processed including updating or editing, adding, deleting, etc.

As to claim 22, the claimed wherein re-transmitting the media stream to one of other intermediary stream processing application and receivers includes removing at least one cue packet to the media stream, is also met by the Flavin, Reynolds and Sequeira references as

combined above in claim 19, where Reynolds teaches the "private" cue packets as described above, and Sequeira as combined teaches that cue packets such as eventIDs, etc., which include start time, end time and other information, as described above, may be processed including updating or editing, adding, deleting, etc.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Allen et al (USPN 5,892,535) – discloses a flexible, configurable, hierarchical system for distributing programming, including the use of one or more distribution networks.

Bryant et al (USPN 5,652,615) – discloses a broadcasting network where programs are distributed to targeted customer premises equipment.

Eldering (USPN 6,615,039) – discloses a targeted advertising system based on subgroups, where different targeted advertisements are transmitted to different subgroups.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is **571-272-7346**. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at **571-272-7353**.

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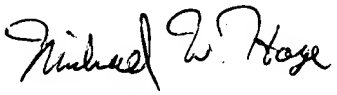
July 19, 2007



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